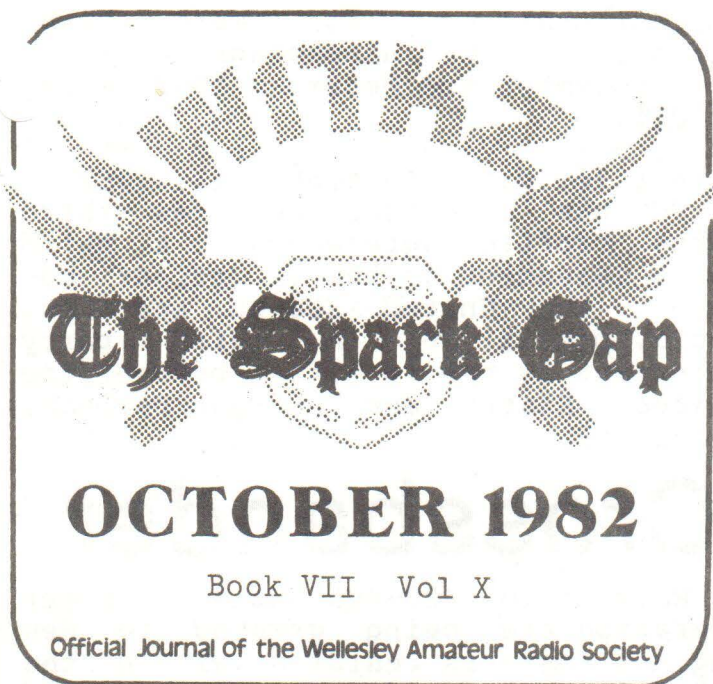




A.R.R.L. Convention

The 1982 ARRL New England Convention will be held the weekend of October 2 and 3 at the Sheraton Boxboro convention center just off of Route 495 in Boxboro, Massachusetts. In addition to a large outdoor flea market both days, there will be variety of commercial exhibitors indoors. There will also be speakers on many subjects including the St. Paul Island DXpedition, VHF interference suppression, the history of two way radio, communications with extra-terrestrials, satellite TV, and much more.

Several members of the Wellesley Amateur Radio Society will have a flea market space outside both days where in addition to trying to sell off some "junk" we will be recruiting new members for the club and for the General licensing class which starts the week after the convention. This spot will also serve as a general meeting place for club members to find each other.

The convention is a very enjoyable

part of the Amateur Radio hobby and if you've never been to one, you should plan to visit Boxboro. Hope to see you there.

ANNOUNCEMENT

As our program for the October 21 meeting we will have a demonstration of the Sinclair ZX-81 home computer by Nels Anderson, K1UR. This computer, which is also being marketed in local stores as the Timex TS-1000, is available for under \$100 (and for a short time as a kit for \$80) and can be used to both send and receive Morse code as well as RTTY, ASCII, and of course anything else that a computer can do. It's ability at Morse code will be demonstrated as part of the night's program as well as a discussion on how Morse is generated and understood by a machine. When you consider that some electronic keyers that are only capable of generating Morse code cost over \$100, you might want to find out more about the ZX-81 for your shack. See you at the club October 21 at 7:30 p.m.

Dues Dues Dues...

With the start of the new club year, it is once again time to pay your club dues. Membership remains at \$8.00 once again this year. To ensure your uninterrupted membership in the Wellesley Amateur Radio Society, please come to one of the October meetings to pay your dues or mail them to the club treasurer, C.J. McDonald, WB1BUM, 48 Hale Street, Newton, Mass. 02164.

MEETINGS THIS MONTH:

October 7, 1982, at 7:30 p.m.

October 21, 1982, at 7:30 p.m.

Intermediate Bldg., Wellesley Hills, Mass.

ELECTRONICS EXCHANGE

For Sale: HT-37 five band transmitter with SSB/AM/CW capabilities. Runs 100 watts. Asking \$120. Call Lud Fasolino, K1LF, at 237-0316.

This column is open to all club members at no charge. To place an advertisement, call or write the editor (see address and phone number on page 3).

"New Tickets"



The first group of students from the spring Novice class taught by Art Thompson, K1ENP, have received their calls. Congratulations to Louie Marotta who is now K1JHS, and to Dorothy Adamo who is now K1JHT. Welcome to the ranks of Amateur Radio operators and to the Wellesley Amateur Radio Society.

OFFICIAL BULLETIN

Number 69, dated August 19, 1982:

ARRL efforts have led to FCC moderating its proposal to permit inland operation of nongovernment radiolocation stations in the 420 to 450 MHz band. A Report and Order in Docket 80-135 limits such operation to spread spectrum emission only, with a frequency limitation of 420 to 435 MHz, a power limitation of 50 watts, and a requirement for a manufacturer's identifier to be built into the emission to aid in tracking down interference. Conventional pulse ranging systems in the 420 to 450 MHz band will continue to be permitted only in coastal areas. Nongovernment radiolocation must not cause interference to

Amateur stations. For more background, see the Happenings column in the September and December 1982 issue of OST.

Number 76, dated September 13, 1982:

FCC has announced two new third party traffic agreements. A third party agreement is now in effect between the United States and St. Lucia, prefix J6. A third party agreement is now in effect between the United States and Antigua/Barbuda, prefix V2.

Crossbander

Waivers for 420-405 MHz high power operation are being granted to New England Amateurs residing within the 100 mile circle of protections around Otis AFB's PAVE PAWS radar installation. According to Boston District Engineer in Charge Vincent Kajunski, all waiver requests have been acted upon. "All the waivers we have forwarded to [the Air Force] to date have either been officially approved in writing or informally approved over the telephone," Kajunski told us August 25th. His office has received 25 waiver requests.

Holders of waivers must: 1) prior to initial operation with power in excess of 50 watts, notify the Air Force Tactical Operation Room at Otis AFB by telephone; 2) maintain a log of operation times and frequencies and forward the log to the Strategic Air Command every 30 days; 3) cease operation with power in excess of 50 watts, upon notification of interference by either the FCC or the Air Force. "[The logging requirement] will probably be eliminated in the future," Kajunski commented.

Crossbander, September 15, 1982

Club members are encouraged to make any type of submission to the Spark Gap, whether an article, technical note, news item, rig for sale, or what have you.

The Spark Gap

Official Journal of the Wellesley Amateur Radio Society



EDITOR-IN-CHIEF:

NELS J. ANDERSON, K1UR
32 WESTGATE ROAD, APT. 6
CHESTNUT HILL, MASS. 02167
323-5029

THE "SPARK GAP" IS A MONTHLY PUBLICATION OF THE WELLESLEY AMATEUR RADIO SOCIETY. ITS PRIMARY PURPOSE IS TO KEEP ITS MEMBERS ABREAST OF CURRENT HAPPENINGS, F.C.C. RULES & REGULATIONS CHANGES, AND TO LIST EQUIPMENT OFFERED FOR SALE OR TRADE BY MEMBERS. MEMBERS ARE ENCOURAGED TO CONTRIBUTE TO THE "SPARK GAP" AND MAY SENT THEIR ARTICLES (TYPEWRITTEN IF POSSIBLE) TO THE EDITOR-IN-CHIEF OR TO THE CLUB ADDRESS.

THE WELLESLEY AMATEUR RADIO SOCIETY IS A NON-PROFIT ORGANIZATION DEDICATED TO THE PROMOTION OF AMATEUR RADIO THROUGH INSTRUCTION, FELLOWSHIP, DEMONSTRATION, AND ENCOURAGEMENT OF PARTICIPATION. ANNUAL MEMBERSHIP IN THE SOCIETY IS \$8. THE CLUB YEAR RUNS SEPTEMBER 1 TO AUGUST 31. AMATEUR NOVICE AND GENERAL CLASSES ARE CONDUCTED REGULARLY AT NO COST. TO ENROLL IN A CLASS, OR GAIN INFORMATION ABOUT THE SOCIETY IN GENERAL, WRITE:

THE WELLESLEY AMATEUR RADIO SOCIETY
324 WASHINGTON STREET
WELLESLEY HILLS, MASS. 02181



education corner



The Wellesley Amateur Radio Society will be sponsoring a General class starting on Wednesday, October 6, at 7:00 p.m. The class will be held weekly and will run for about 12 weeks, finishing just before the Christmas holidays. The class will cover all aspects of theory and rules related to the General class license but will not cover the 13 w.p.m. code requirement unless there is a great demand from the students. If you are a Novice looking to upgrade, or know someone who is, have them contact the club education chairman, Art Thompson, at 235-5509 for more information, or simply come to the club on Wednesday, October 6 at 7:00 p.m.

We are also tentatively scheduling a Novice class to start January 5, 1983, after publicizing it at the Natick Mall Message Fair.

OFFICERS

Minutes

Meeting of September 2, 1982:

The meeting was opened at 7:35 p.m. by President David Curry, K1TK.

The 1982/83 calendar of events was discussed and approved with the addition of the SET on October 17.

The 1982/83 budget was also discussed and approved.

The need for licensing classes was discussed and it was decided to start a General class this fall and have a Novice class start in January after having the Natick Mall Message Fair for publicity.

A reminder was made of the VHF contest September 11 and 12.

The meeting was closed at 8:40 p.m.

PRESIDENT:

David Curry, K1TK, 237-2450

VICE PRESIDENT:

Roger Smith, W1EOA, 235-6239

RECORDING SECRETARY:

Nels Anderson, K1UR, 323-5029

CORRESPONDING SECRETARY:

Skid Schermerhorn, W1TTY, 235-1987

TREASURER:

C.J. McDonald, WB1BUM, 332-6091

FUND RAISING:

Kevin Kelly, W1YHV, 242-0341

OPERATING ACTIVITIES:

Erik Thoresen, K1OGF, 653-1216

VHF CONTEST

by Nels Anderson, K1UR

The September 1982 ARRL VHF QSO Party was held the weekend of September 11 and 12 and for the very first time since we have been going to Mt. Equinox in southern Vermont for these contests, we had an entire weekend of nice weather. That's right, no fog! We've gotten used to ending the weekend with equipment, vehicles, and operators saturated with water from the fog (and sometimes rain) that has always come at some time during the weekend, but it didn't happen this time.

Apparently the equipment didn't like the nice, sunny weather as we had more equipment trouble than we've had since the fog melted the two meter quagi array a few years ago. Not one but both 10 GHz Gunnplexers failed to operate properly so that we were unable to make any contacts on that band. The 432 MHz station which we had attempted to put together neatly on a single chassis instead of having the many components spread out all over also failed to work properly. We ended up operating with only 15 watts output with no preamp and no big linear amp. Fortunately, our antenna array worked reasonably well (especially considering that someone put the two halves of each antenna together backwards) which helped make up for the other problems. As if this weren't enough, the new VFO that was built for the 220 MHz station didn't work either, so we were left with still having the driftiest signal on the band.

All was not lost, however, as the new improved six meter station did work up to expectations. The rebuilt antenna which now sports six elements on a 24 foot boom performed to expectations and the dual amplifier arrangement also helped provide a booming signal.

Band conditions were nothing like they were in June when six meters was open to all parts of the country and there was aurora for large portions of the weekend to provide some good DX on the higher bands. Despite this, we managed to equal the number of sections we worked in June on two meters which shows that one band at least was working properly. The openings, such as they were, on six and two were brief but we were able to catch most of the sections that were available.

Our final results were as follows:

BAND	QSOS	POINTS	MULT.
50	337 x 1	337	31
144	362 x 1	362	25
220	16 x 2	32	8
432	42 x 2	84	16
1296	10 x 3	30	5
2304	2 x 3	6	2
TOTAL	769	851	87
SCORE:	74037 POINTS		

Operators for this year's September VHF QSO Party were K1TK, K1UR, W1LPQY, W1GCI, W1EDF, N2AWG, W1OOP, W1BUM, K1OGF, and W1ZLQ.

It should also be mentioned that several operators were involved in the auto race up the mountain which took place at the same time as the contest. This activity once again contributed to the safety as well as providing the timing of the racers.

THE WESTLINK REPORT THE AMATEUR RADIO NEWSLETTER

Congress has given final approval to S-929. Now known as HR-3239, the 1982 FCC Revision Act cleared Congress after a joint House/Senate conference worked out differences between the original bills (S-929 and HR-5008) on August 19th. The bill was attached to the 1983 N.T.I.A. Appropriations measure, and the President is expected to sign it into law within a few days.

The act gives the FCC the authority to impose new RFI standards on the manufacturers of TV sets, to deregulate CB radio, and to allow the use of

Amateur Radio operators as volunteers in the areas of testing and regulatory enforcement. The Electronics Industry Association (EIA) put up a vigorous lobbying effort against the measure because it may cost manufacturers as much as \$2 extra per television set to reduce its susceptibility to RFI.

Solving the RFI problem is a noble cause, but that isn't the reason the Legislature passed the measure. Approval came because the bill includes the provision that deregulates Class D Citizens Band, and will save the FCC hundreds of dollars a year in costs involved in processing CB licenses. CBers will still have to live by the rules of the Citizens Radio Service, only now operators will not longer be licensed.

Westlink Report, August 27, 1982
(This bill was signed into law by President Reagan on September 10, 1982.)

Use of the new 10 MHz WARC band may be authorized for U.S. hams by year's end. FCC Chairman Mark Fowler has responded to a letter sent him by Senators Barry Goldwater, K7UGA (R-Arizona) and Harrison Schmitt (R-New Mexico) which requested the new 30 meter band be opened quickly. In his response, Fowler said he will do what he can to get U.S. Amateurs operating on the new band as soon as possible. According to Chairman Fowler, until now the Commission has taken the position of not implementing any part of the 1979 WARC agreement until the Senate ratifies the Treaty. This posture is changing, and sometime this fall expect the FCC to begin two actions. First, they will probably issue a Notice of Proposed Rulemaking to permanently allocate the band to the Amateur Service; and second, they will consider granting temporary authority to operate there, pending formal Treaty ratification. While Fowler's letter to the Senators did not spell out any timetable for this action to take place, some Washington insiders feel it could begin in mid-September,

not too late for a possible "Christmas present" from the FCC.

Westlink Report, August 27, 1982

Another European Space Agency Ariane rocket has failed at launch. On September 10, an Ariane was launched from the ESA center in South America and after only a short flight crashed into the Atlantic Ocean. What this will mean to the launch of the OSCAR Phase IIIB satellite remains to be seen, but AMSAT should certainly be careful after having lost OSCAR Phase IIIA in a similar Ariane failure.

CHUCKLE KORN

by Joseph Ventolo, K8DMZ
--from GEARVAKF, via ARNS

As announced in a previous issue, the FCC has installed a sprinkler system on the 20 meter band to prevent any future conflagrations similar to the one which broke out on the band two years ago. At the same time the sprinkler system was installed, plans were made to erect supports at regular intervals to prevent sagging in certain areas due to the perching of migratory birds. At certain times of the year, entire flocks of these birds migrate thousands of miles, and in recent years have stopped to rest on various sections of the 20 meter band. (Our resident ornithologist explains that the birds use the 20 meter band because the width of the band most nearly fits their feet. They also can find the band at convenient altitudes along their migratory routes.) These supports should not cause any trouble to aircraft. FCC Special Frequency Safety Engineer, Ralph Spiffie, explained that the supports would be constructed by a new method. "It is a rotating system in which sunbeams are used as support during the day and moon beams are used at night. During periods of overcast skies or the new moon, we will dispatch special crews

to tie the sagging areas of 20 meters to the more sturdy portions of the 15 meter CW band," he said.

Crossbander

A section-wide simulated emergency test will be conducted sometime on the morning of October 16. Eastern Mass League Officials met recently to plan the event. They released few details but said the simulated emergency will involve several non-Amateur and Amateur emergency groups. Official Bulletin Stations are to disseminate "emergency" information. ARES/RACES groups are encouraged to sponsor local drills. NTS will operate all of its three cycles; the first section net session begins 10 a.m. All participants should monitor established alerting and net frequencies for the start of the test.

Crossbander, September 15, 1982

Two satellites carrying Amateur Radio could be in geosynchronous orbit by late 1985, according to AMSAT. A comprehensive proposal for a system of geosynchronous satellites has been filed with the FCC by a Florida cable TV operator. The filed petition contains a proposal to place two Amateur Radio satellite transponders, along with two primary non-Amateur satellite payloads, in orbit over the Western Hemisphere. The transponders would operate on 5.65-5.67 GHz (uplink) and 3.40-3.41 GHz (downlink) Amateur frequencies.

Cablesat General Corporation of Cocoa, Florida requested permission to build, launch and operate the satellites; the Cablesat East bird would be located over the equator between 60 and 70 degrees west longitude with Cablesat West placed over the equator between 140 and 150 degrees west. From these vantages the two satellites could serve the entire continental United States, most of Canada and Mexico, and most of the Caribbean.

The Cablesat proposal calls for a Midwest command station to connect the two satellites so that a virtual inter-satellite link would exist. The system would be called ARNET (Amateur Radio Network Experimental Transponder). ARNET would also be the name of a non-profit corporation that would be established as owners of the satellites. Cablesat would donate the OSCARS to ARNET. ARNET would in turn assign operational responsibility to ARRL. ARRL would also be responsible for usage planning, coordination, activation and publicity for the project.

AMSAT and ARRL officials express guarded optimism toward the proposal. Although plans and talks are only in the preliminary stage, the decade-long dream of Amateur geosynchronous satellites may soon be realized. Thanks ASR.

Crossbander, September 15, 1982

THE WESTLINK REPORT THE AMATEUR RADIO NEWSLETTER

"Ultra long range" cordless telephones could pose a new threat to Amateur Radio. Two such units are already being marketed for export use only, but at least one of these (Noncord DX model NC-20M) is designed for transmit operation in the 143 to 147 MHz range. A flyer for the device claims a range of 20 miles and a power of 13 watts. Options include gain antennas and a 25 watt "booster" for increased range. Though these and similar units are illegal for use in the United States, nowhere in the Noncord literature is this mentioned.

Westlink Report, September 10, 1982

Eight hams supplied communications for "Summerfest Three" on August 8. Held on Boston's Charles River Esplanade, the annual carnival attracted thousands of handicapped individuals. Several lost people were found, and an ambulance was summoned during the ten hour operation.

Westlink Report, September 10, 1982